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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/752,009

12/28/2000

Mohammad J. Arshad

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12/05/2003

CASE NEW HOLLAND INC.
CNH - IP LAW DEPARTMENT
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NEW HOLLAND, PA 17557

EXAMINER

BROWN, VERNAL U

ART UNIT

PAPER NUMBER

2635

DATE MAILED: 12/05/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,009

Applicant(s)

ARSHAD ET AL.

Examiner

Vernal U Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to communication filed on September 9, 2003.

Response to Amendment

The examiner has acknowledged the cancellation of claims 1, 9, 12, 15-20 and 23.

Response to Arguments

Applicant's arguments with respect to claims 1-9, 12, 17, and 21-23 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed September 9, 2003 have been fully considered but they are not persuasive.

Regarding argument regarding claims 15-16 and 18-20, Doyle teaches the driver of the vehicle is provided with a mobile communication terminal which is used to transfer updated information to the vehicle electronic control unit (col. 4 lines 5-14) and the mobile communication terminal uses the vehicle data link (col. 4 lines 9-10) which suggests the data is downloaded from a transceiver brought in proximity to the vehicle. The reference of Giessler is further relied upon for teaching downloading data from a transponder brought in close proximity to the vehicle (col. 3 lines 31-37).

Claim Objections

Claim 7 is objected to because of the following informalities: Claim 7 is not numbered. Appropriate correction is required.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick U.S patent 6480117 in view of Schwegler et al. U.S Patent 5808372 and further in view of Ohsuga et al. U.S Patent 5369581.

Regarding claim 1, Flick teaches a method of controlling the operation of a vehicle with a radio communications circuit configured to communicate with a vehicle operator's handheld radio frequency transponder(col. 5 lines 10-14), the method comprising the steps of: providing the vehicle having the bi-directional radio communications circuit (col. 5 lines 5 lines 10-12); providing the radio transponder to the vehicle operator (col. 7 lines 32-35); generating electromagnetic radiation from the radio communications circuit by communicating wirelessly (figure 4); bringing the transponder within the range of the electromagnetic radiation (figure 4); energizing the transponder by the electromagnetic radiation (col. 8 lines 41-46); transmitting first information from the transponder after the step of energizing the transponder (col. 8 lines 52-55); receiving at the reader circuit the first information transmitted by the transponder; and controlling at least one subsystem of the vehicle (engine start or run enable) in response to the

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first information received at the transponder (col. 8 lines 37-40). Flick further teaches a radio communication circuit (13) coupled to a microprocessor based controller (12) and the circuit is configured to communicate with a vehicle hand held transponder (col. 5 lines 10-14). Flick teaches the communication circuit and a plurality of control means connected to the controller (figure 1) but is silent on teaching the radio communication circuit coupled to a first microprocessor based controller, a microprocessor based controller configured to control a plurality of hydraulic actuators, and a third a microprocessor based controller configured to control a vehicle engine and the first second and third controllers are coupled by a serial communication bus. Schwegler et al. in an art related vehicle control system invention teaches a communication circuit (21) and various vehicle controllers connected to a serial bus (26) (col. 5 lines 12-20) but is silent on teaching the controllers are microprocessor based. Ohsuga et al. in an art related vehicle control system teaches various microprocessor based controllers connected by a serial bus (figure 14) which includes a microprocessor-based controller (50) configured to control a vehicle engine, microprocessor-based throttle control and further teaches a controller (64) for controlling the hydraulic actuators (col. 9 lines 48-57).

It would have been obvious to one of ordinary skill in the art for the control system to comprise a first microprocessor-based controller coupled to the reader circuit, a second microprocessor-based controller configured to control a vehicle engine; a third microprocessor-based controller configured to control a vehicle transmission, and a fourth microprocessor-based controller configured to control vehicle hydraulic actuators and the control system further comprising a serial communication bus coupling the first, second, third controllers in Flick as evidenced by Schwegler et al. in view of Ohsuga et al. because Flick suggest a system for

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controlling the operation of a vehicle which includes microprocessor based controllers connected by a bus and Schwegler et al. in view of Ohsuga et al. teaches microprocessor based controllers including vehicle engine controller, vehicle transmission controller, and hydraulic controller connected by a serial bus.

Regarding claim 2, Flick teaches the radio transponder includes a low power micro controller (56) configured to receive its operating power from the electromagnetic radiation (col. 8 lines 41-46).

Regarding claim 3, Flick teaches providing the radio transponder includes the step of molding the radio transponder into a vehicle ignition key (figure 5).

Regarding claim 4, Flick teaches embedding the radio transponder in a hand-held card (81, figure 4).

Regarding claim 5, Flick teaches mechanically bonding the radio transponder to a Vehicle ignition key by means of a key ring (figure 4).

Claims 6-7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick U.S patent 6480117 in view of Schwegler et al. U.S Patent 5808372 in view of Ohsuga et al. U.S Patent 5369581 and further in view of Konrad et al. U.S Patent 6020827.

Regarding claims 6-7, Flick in view of Schwegler et al in view of Ohsuga et al teaches each transponder is uniquely coded for identification purposes (col. 6 lines 31-35) but is not explicit in teaching the transmission from the transponder includes a value that identifies the

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operator. Konrad et al. in an art related invention in the same field of endeavor of vehicle security teaches a transponder providing user identification (col. 1 lines 17-20) and compare the user identification with the previously stored information (col. 1 lines 51-56) in order to verify the identification of the user.

It would have been obvious to one of ordinary skill in the art for the transmission from the transponder includes a value that identifies the operator in Flick in view of Schwegler et al in view of Ohsuga et al as evidenced by Konrad et al. because Flick in view of Schwegler et al in view of Ohsuga et al suggests each transponder is uniquely coded for identification purposes and Konrad et al. teaches a transponder providing user identification and compare the user identification with the previously stored information in order to verify the identification of the user.

Regarding claim 8, Flick teaches controlling the operation of the vehicle engine (col. 8 lines 36-38).

Claims 9-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giessl U.S patent 6538557 in view of Schwegler et al. U.S Patent 5808372.

Regarding claim 9, Giessl teaches a method of controlling the operation of a vehicle in response to data received from a radio transponder (col. 2 lines 40-42), the method includes storing data in the transponder indicative of the operator and downloading the data from the transponder to the vehicle the data indicative of the operator (col. 3 lines 31-37), comparing by the vehicle controller of the downloaded data indicative of the operator with data previously stored in the vehicle (col. 3 lines 37-40) and limiting the functionality of the vehicle based on the downloaded data (col. 6 lines 31-34). Giessl also teaches generating by the vehicle of an

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electromagnetic field sufficient to energize the transponder (5) which enable the communication between the transponder and the vehicle (col. 4 lines 40-43) but is however silent on teaching and signaling the limited functionality to at least one of a microprocessor-based engine controller and a microprocessor-based auxiliary controller over a serial communication bus from the first microprocessor-based controller and responsively limiting the functionality of the vehicle.

Schwegler et al. in an art related vehicle control system invention teaches various controllers connected to a serial bus (26) in a vehicle (26) (col. 5 lines 12-20). Schwegler et al. further teaches signaling the limited functionality to at least one of a microprocessor-based engine controller and a microprocessor-based auxiliary controller over a serial communication bus from the first microprocessor-based controller (col. 6 lines 3-19).

It would have been obvious to one of ordinary skill in the art for signaling the limited functionality to at least one of a microprocessor-based engine controller and a microprocessor-based auxiliary controller over a serial communication bus from the first microprocessor-based controller and responsively limiting the functionality of the vehicle in Giessler as evidenced by Schwegler et al. because Giessler suggests a method of controlling the operation of a vehicle in response to data received from a radio transponder and Schwegler et al. teaches signaling the limited functionality to at least one of a microprocessor-based engine controller and a microprocessor-based auxiliary controller over a serial communication bus from the first microprocessor-based controller.

Regarding claims 10-11 and 13-14, Giessler teaches operational parameters includes distance traveled, times of day in which the operation of the vehicle is permitted, an elapsed time of operation (col. 1 lines 25-30).

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Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giessler U.S patent 6538557 in view of Goldman et al. U.S patent 6430488.

Regarding claims 12, Giessler teaches a method of controlling the operation of a vehicle in response to data received from a radio transponder (col. 2 lines 40-42), the method includes

storing data in the transponder indicative of the operator and downloading the data from the transponder to the vehicle the data indicative of the operator (col. 3 lines 31-37), comparing by the vehicle controller of the downloaded data indicative of the operator with data previously stored in the vehicle (col. 3 lines 37-40) and limiting the functionality of the vehicle based on the downloaded data (col. 6 lines 31-34). Giessler also teaches generating by the vehicle of an electromagnetic field sufficient to energize the transponder (5) which enable the communication between the transponder and the vehicle (col. 4 lines 40-43) but is silent on teaching the operational parameter includes a geographical area. Goldman et al. in an art related vehicle customization invention teaches downloading from a storage device the operational parameter including a geographical area in which the vehicle must be operated in (col. 9 lines 39-56). One skilled in the art recognizes that transponders are considered storage device.

It would have been obvious to one of ordinary skill in the art for the operation parameters to include a geographical area in which the vehicle must be driven in Giessler as evidenced by Goldman et al. because Giessler suggests downloading operational parameters to the vehicle to control the operation of the vehicle and Goldman et al. teaches downloading from a storage device the operational parameters of the vehicle which includes defining a geographical area in

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which the vehicle must be driven and one skilled in the art recognizes that transponders are considered as storage devices.

Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giessler U.S. patent 6538557 in view of Doyle U.S. Patent 5815071.

Regarding claims 15-16, Giessler teaches a method of controlling the operation of a vehicle in response to data received from a radio transponder (col. 2 lines 40-42), the method includes storing data in the transponder indicative of the operator and downloading the data from the transponder to the vehicle the data indicative of the operator (col. 3 lines 31-37), comparing by the vehicle controller of the downloaded data indicative of the operator with data previously stored in the vehicle (col. 3 lines 37-40) and limiting the functionality of the vehicle based on the downloaded data (col. 6 lines 31-34). Giessler also teaches generating by the vehicle of an electromagnetic field sufficient to energize the transponder (5) which enable the communication between the transponder and the vehicle (col. 4 lines 40-43) but is silent on teaching the operational parameters includes the maximum engine load and the speed of the vehicle. Doyle in an art related invention in the same field of endeavor of vehicle control system teaches the operational parameter includes the speed of operation of the vehicle and load the engine load (by controlling the RPM) (col. 4 lines 61-64) for controlling the operation of the vehicle.

It would have been obvious to one of ordinary skill in the art for the operational parameters of the vehicle to include the maximum engine load and the speed of the vehicle in

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Giessler in view of Flick as evidenced by Doyle because Giessler in view of Flick suggests downloading operational parameters to the vehicle and Doyle teaches the operational parameter includes the speed of operation of the vehicle and load the engine load (by controlling the RPM) for controlling the operation of the vehicle.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flick U.S. patent 6480117 in view of Schwegler et al. U.S. Patent 5808372 and further in view of Ohsuga et al. U.S. Patent 5369581.

Regarding claim 17, Flick teaches a system for controlling the operation of a vehicle (figure 1) comprising:

a portable transponder (figure 2) including a microcontroller (56) and include digital memory for storing the code (col. 10 lines 60-62);

a vehicle comprising a transponder (10) configured to transmit electromagnetic radiation sufficient to energize and enable the transponder to transmit the data (col. 8 lines 41-46) and a control system configured to input data from the transponder reader circuit (col. 5 lines 26-35).

Flick is however silent on teaching control system comprising a first microprocessor-based controller coupled to the reader circuit, a second microprocessor-based controller configured to control a vehicle engine; a third microprocessor-based controller configured to control a vehicle transmission, and a fourth microprocessor-based controller configured to control vehicle hydraulic actuators, the control system further comprising a serial communication bus coupling the first, second, third and fourth controllers, wherein the first controller is configured generate control signals and transmit those control signals over said serial bus to said second,

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third or fourth controllers based upon said data received from the transponder, and further wherein the second, third or fourth controllers are configured to responsively control the vehicle engine, vehicle transmission or the vehicle hydraulic actuators. Schwegler et al. in an art related vehicle control transponder system teaches a vehicle control system comprising a first controller (22) coupled to a reader circuit (21), second, third, and fourth controllers (30-33) configured to control the vehicle functional units (col. 5 lines 12-18) over a serial bus (26). Schwegler et al. further teaches the functional control units include a (transmission) gearbox control (col. 6 line 32), engine control (col. 6 line 31) Schwegler et al. is however not explicit in teaching microprocessor based controllers and a hydraulic controller. Ohsuga et al. in an art related vehicle control system teaches various microprocessor based controllers connected by a serial bus (figure 14) which includes a microprocessor-based controller (50) configured to control a vehicle engine, microprocessor-based throttle control and microprocessor-based transmission control (figure 14) and further teaches a controller (64) for controlling the hydraulic actuators (col. 9 lines 48-57).

It would have been obvious to one of ordinary skill in the art for the control system to comprise a first microprocessor-based controller coupled to the reader circuit, a second microprocessor-based controller configured to control a vehicle engine; a third microprocessor-based controller configured to control a vehicle transmission, and a fourth microprocessor-based controller configured to control vehicle hydraulic actuators and the control system further comprising a serial communication bus coupling the first, second, third and fourth controllers in Flick as evidenced by Schwegler et al. in view of Ohsuga et al. because Flick suggest a system for controlling the operation of a vehicle which includes microprocessor based controllers

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connected by a bus and Schwegler et al. in view of Ohsuga et al. teaches microprocessor based controllers including vehicle engine controller, vehicle transmission controller, and hydraulic controller connected by a serial bus.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick U.S. patent 6480117 in view of Doyle U.S. Patent 5815071.

Regarding claim 18-20, Flick teaches a system for controlling the operation of a vehicle (figure 1) comprising:

a portable transponder (figure 2) including a microcontroller (56) and include digital memory for storing the code (col. 10 lines 60-62);

a vehicle comprising a transponder (10) configured to transmit electromagnetic radiation sufficient to energize and enable the transponder to transmit the data (col. 8 lines 41-46) and a control system configured to input data from the transponder reader circuit (col. 5 lines 26-35). Giessler also teaches generating by the vehicle of an electromagnetic field sufficient to energize the transponder (5) which enable the communication between the transponder and the vehicle (col. 4 lines 40-43) but is silent on teaching the operational parameters includes the maximum engine load and the speed of the vehicle. Doyle in an art related invention in the same field of endeavor of vehicle control system teaches the operational parameter includes the speed of operation of the vehicle and load the engine load (by controlling the RPM) (col. 4 lines 61-64) for controlling the operation of the vehicle.

It would have been obvious to one of ordinary skill in the art for the operational parameters of the vehicle to include the maximum engine load and the speed of the vehicle in Giessler in view of Flick as evidenced by Doyle because Giessler in view of Flick suggests downloading operational parameters to the vehicle and Doyle teaches the operational parameter includes the speed of operation of the vehicle and load the engine load (by controlling the RPM) for controlling the operation of the vehicle.

Claims 21 and 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flick U.S. patent 6480117 in view of Schwegler et al. U.S. Patent 5808372 in view of Ohsuga et al. U.S. Patent 5369581 and further in view of Giessler U.S. patent 6538557.

Regarding claims 21 and 23, Flick in view of Schwegler et al. in view of Ohsuga et al. teaches transmitting data from the transponder to control the operation of the vehicle (col. 6 lines 9-15) but is silent on teaching the vehicle control system is configured to disable the vehicle after a predetermined amount of time of operation based on the data received from the transponder. Giessler in an art related invention of securing a vehicle against unauthorized use by controlling the operation of a vehicle in response to data received from a radio transponder (col. 2 lines 40-42) and disable the vehicle after a predetermined amount of time of operation based on the data received from the transponder (col. 7 lines 65-66).

It would have been obvious to one of ordinary skill in the art for the vehicle control system to be configured to disable the vehicle after a predetermined amount of time of operation based on the data received from the transponder in Flick in view of Schwegler et al. in view of Ohsuga et al. as evidenced by Giessler because Flick in view of Schwegler et al. in view of

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Ohsuga et al. suggests transmitting data from the transponder to control the operation of the vehicle and Giessl teaches securing a vehicle against unauthorized use by controlling the operation of a vehicle in response to data received from a radio transponder and disable the vehicle after a predetermined amount of time of operation based on the data received from the transponder in order to ensure time limit on the use of the vehicle.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flick U.S patent 6480117 in view of Schwegler et al. U.S Patent 5808372 in view of Ohsuga et al. U.S Patent 5369581 and further in view of Rick et al. U.S patent 6552648.

Regarding claim 22, Flick in view of Schwegler et al. in view of Ohsuga et al. teaches transmitting data from the transponder to control the operation of the vehicle (col. 6 lines 9-15) but is silent on teaching the vehicle control unit configured to disable the vehicle if it travels outside a predetermined area. Rick et al. in an art related invention in the same field of endeavor of vehicle control system teaches a vehicle control unit configured to disable the vehicle if it travels outside a predetermined area (col. 2 lines 25-30) in order to ensure that the vehicle is only used in authorized areas.

It would have been obvious to one of ordinary skill in the art to configure the vehicle control unit to disable the vehicle if it travels outside a predetermined area in Flick in view of Schwegler et al. in view of Ohsuga et al. as evidenced by Rick et al. because Flick in view of Schwegler et al. in view of Ohsuga et al. suggests transmitting data from the transponder to control the operation of the vehicle and Rick et al. teaches a vehicle's control unit configured to

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disable the vehicle if it travels outside a predetermined area in order to ensure that the vehicle is only used in authorized areas.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U Brown whose telephone number is 703-305-3864. The examiner can normally be reached on M-Th, 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Vernal Brown
November 18, 2003

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

